We don’t use polynomial because it causes overfitting that’s why we use linear model as it gives the average of the data. We don’t use polynomial formula or cubic spline formula as the data is changing or not fixed.

What is overfitting?

A model is said to be overfitting if;

Has high accuracy in the test data set,but

The model has low accuracy in data not include in the training set.

Hyperparametr: model parameter whose values cant be inferred from data. e.g: height of tree, no. of branches,etc.

Hypermeters are:

-Max. allowable tree depth

-Branching factor

-No. of record of crossponding nodes